

CLAIMS

1. A work-hardened stainless steel sheet characterized by:
a chemical composition consisting of 0.15 mass % or less of C, 1.0 mass % or less of Si, 1.0 mass % or less of Mn, 0.005 mass % or less of S, 10-20 mass % of Cr, 0.5 mass % or less of Ni, 0.001-0.05 mass % of Al and the balance being Fe except inevitable impurities; and
a work-hardened ferritic structure, wherein Al_2O_3 and/or $\text{Al}_2\text{O}_3 \cdot \text{MgO}$ inclusions of 10 μm or less in size are distributed with an index of cleanliness of 0.06% or less.
2. The work-hardened stainless steel sheet of Claim 1, wherein the chemical composition further includes one or more of 0.5-2.0 mass % of Mo, 0.5-3.0 mass % of Cu and 0.05-1.0 mass % of Nb.
3. The work-hardened stainless steel sheet of Claim 1 or 2, wherein the stainless steel sheet has yield strength within a range of 500-900 N/mm².